# (19) World Intellectual Property Organization International Bureau





(43) International Publication Date 16 December 2004 (16.12.2004)

**PCT** 

# (10) International Publication Number WO 2004/108938 A3

(51) International Patent Classification<sup>7</sup>: C12N 15/861, C07K 7/06, A61K 48/00

(21) International Application Number:

PCT/GB2004/002421

(22) International Filing Date: 7 June 2004 (07.06.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data: 03 13132.3 6 June 2003 (06.06.2003) GB

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- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM,

AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

#### Published:

- with international search report
- with amended claims

(88) Date of publication of the international search report: 12 May 2005

Date of publication of the amended claims:

7 July 2005

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: PEPTIDE LIGANDS OF DENDRITIC CELLS FOR NUCLEIC ACID VECTOR TARGETING

(57) Abstract: A peptide consisting of or comprising an amino acid sequence selected from a )  $Px^1X^2X^3$  T [SEQ.ID.NO.:1]; b)  $PSX^4S$  [SEQ.ID.NO.:2]; C)  $QX^5X^6X^7Q$  [SEQ.ID.NO.:3]; d)  $SX^8S$  [SEQ.ID.NO.:4], in which  $X^1$ ,  $X^2$  and  $X^3$ , which may be the same or different, each represents an amino acid residue;  $X^2$  is preferably N or L;  $X^4$  represents an amino acid residue, preferably N or L;  $X^5$  and  $X^7$ , which may be the same or different, each represents an amino acid residue,  $X^6$  represents an amino acid residue having an amide side chain; and  $X^8$  represent an amino acid having an aliphatic side chain, which peptide binds to dendritic cells and also to other types of cells. The peptide may be used a target non-viral and viral vectors to such cells.



### AMENDED CLAIMS

## [received by the International Bureau on 28 April 2005 (28.04.05); Claim 109 amended (2 pages)]

- 103. Use of a transfection complex or viral vector as claimed in any one of claims 65 to 75, 79 to 81 and 83 to 96 for the manufacture of a medicament for the prophylaxis of a condition caused in a human or a non-human animal by a defect and/or a deficiency in a gene, or for therapeutic or prophylactic immunisation, or for anti-sense therapy.
- 104. A kit that comprises
  - (i) a nucleic acid,
- 10 (ii) a lipid component,
  - (iii) a polycationic nucleic acid-binding component, and (iv) a peptide as claimed in any one of claims 1 to 34, which peptide is not subject to the proviso of claim 1.
- 15 105. A kit that comprises

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- (i) a nucleic acid,
- (iii) a polycationic nucleic acid-binding component, and (iv) a peptide as claimed in any one of claims 1 to 34, which peptide is not subject to the proviso of claim 1.
- 106. A bispecific antibody that is capable of binding to a virus and to a peptide as claimed in any one of claims 1 to 34.
- 25 107. A fusion protein that comprises a peptide as claimed in any one of claims 1 to 34, which peptide is not subject to the proviso of claim 1, and antibody that is capable of binding to a virus.
- 30 108. A method for identifying an siRNA, which comprises transfecting a cell that expresses a target gene with the siRNA and quantifying expression levels.
- 109. A peptide having the sequence DWWHTSA [SEQ.ID.NO.:28] or SHVKLNS [SEQ.ID.NO.:29] or QLLTGAS [SEQ.ID.NO.:30] or

TARDYRL [SEQ.ID.NO.:31] or FPRAPHH [SEQ.ID.NO.:32] or SEWLSAL [SEQ.ID.NO.:33] or IGGIRRH [SEQ.ID.NO.:34] or YTMEFNR [SEQ.ID.NO.:35] or MASISMK [SEQ.ID.NO.:27] or PAAYKAH [SEQ.ID.NO.:36].